

## DETAILED ACTION

### *Statement of Reasons for Allowance*

1. **Claims 1, 5-7 and 9-14** are allowable. The claims are drawn to a flame retardant resin composition comprising a polycarbonate type resin with a fly ash which is a complex of silicon dioxide and aluminum oxide which a D50 of 1 to 10 microns and has two peaks in the particle size distribution. The ratio of the peak corresponding to the particle size distribution of the larger particles to the peak corresponding to the particle size distribution of the smaller particles is less than or equal to 10 and the amount of the fly ash particles having a particle size of 20 micron or less is 70 weight % or more. The fly ash is present in the total composition in an amount of 1 to 60 weight % and the resin has a flame retardancy rated VO in the UL94V method.

The claims are allowable over the closest prior art, namely, **Hwang et al (WO 99/37592)** and **Kulkarni (Studies on Fly Ash-Filled Epoxy-Cast Slabs Under Compression, Journal of Applied Polymer Science Vol. 84, 2404-2410 (2002))**.

Hwang '592 teaches a composition comprising a polycarbonate type resin (page 8, line 34) and fly ash particles (page 4, line 9) having a mean particle size of less than 10 microns (page 5, line 27) and all the particles have a size smaller than 20 microns (page 12, Table 2). However, Hwang '592 fails to teach or suggest that the fly ash has two peaks in its particle size distribution wherein the peak corresponding to the particle size distribution of large particle is greater than the peak corresponding to the particle size distribution of smaller particles.

Kulkarni teaches a fly ash composition in which there is a bimodal distribution in which the portion of the large particles is greater than the peak corresponding to the particle size distribution of smaller particles (page 2405, graph). However, Kulkarni fails to teach or suggest that the fly ash has the desired D50 parameters nor does it teach or suggest that the fly ash is incorporated into polycarbonate resin.

Neither reference teaches or suggests that the flame retardancy property as presently claimed.

Thus, it is clear that the references, taken individually or in combination, do not disclose or suggest the claimed invention.

In light of the above, it is clear that rejections of record are untenable and thus the present claims are passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DORIS LEE whose telephone number is (571)270-3872. The examiner can normally be reached on Monday - Thursday 7:30 am to 5 pm and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Doris L Lee/  
Primary Examiner, Art Unit 1764